New York State Department of Agriculture and Markets

Commissioner Nathan L. Rudgers

Division of Plant Industry Director Robert J. Mungari

Sirex noctilio

Acknowledgments:

NYSDAM

Ethan Angell
Eric Birkland
Michael Martel, GIS Manager
Kennoth Carnes, SSC

USDA-APHIS-PPO

Yvonne DeMarinio
Paul Wrege
Darryl Jewett, PSS
Vic Mastro

US Forest Service

Kevin J. Dodds
Dennis Haugen
Nathan Schift
Noel Schneeberger

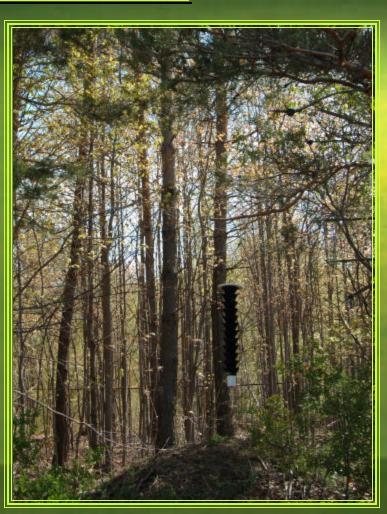
NYSDEC

Jerry Carlson
Jason Denham



Initial Sirex Detection

- September 7, 2004 specimen was collected.
- Specimen was a female Sirex noctilio caught in a Lindgren Funnel trap
- The trap was baited with:
 - alpha-pinene
 - cis-verbenol
 - ipsidienol
 - methyl butenol
- Identified by Dr. Richard Hoebeke Cornell Department of Entomology on February 19, 2005
- Confirmed February 2005 by Dr. David Smith





Aerial Photograph of Trap location

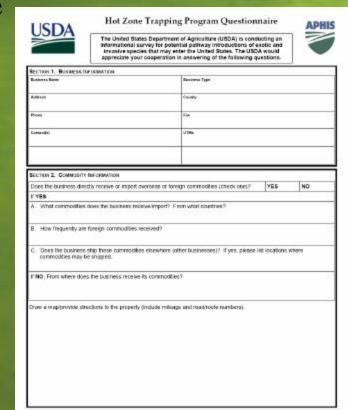


Phase 1 — Rapid Response Commercial Business / Industrial Survey and Public Outreach

March 29 – April 1, 2005

Survey Data

- Establishments Identified through use of Arc GIS Property Parcel Information System
- 86 Businesses Identified for Inspection
- Survey teams comprised of NYSDAM, USDA-APHIS-PPQ, and US Forest Service conducted inspections using the Hot Zone questionnaire
- Only 5 import product from outside the United States
- 3 import from over seas
- 2 import from Canada

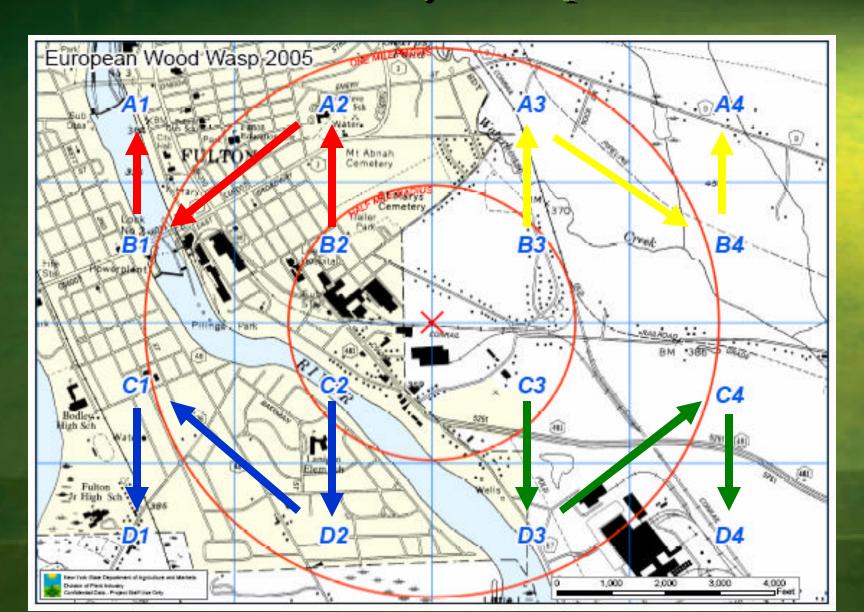


If answer to question in Section 2 is YES, complete Sections 3 & 4 on Page 2, Sign and Date. If answer to question in Section 2 is NO, skip Sections 3 & 4. Sign and date on Page 2.

Visual Survey of Wood Packing



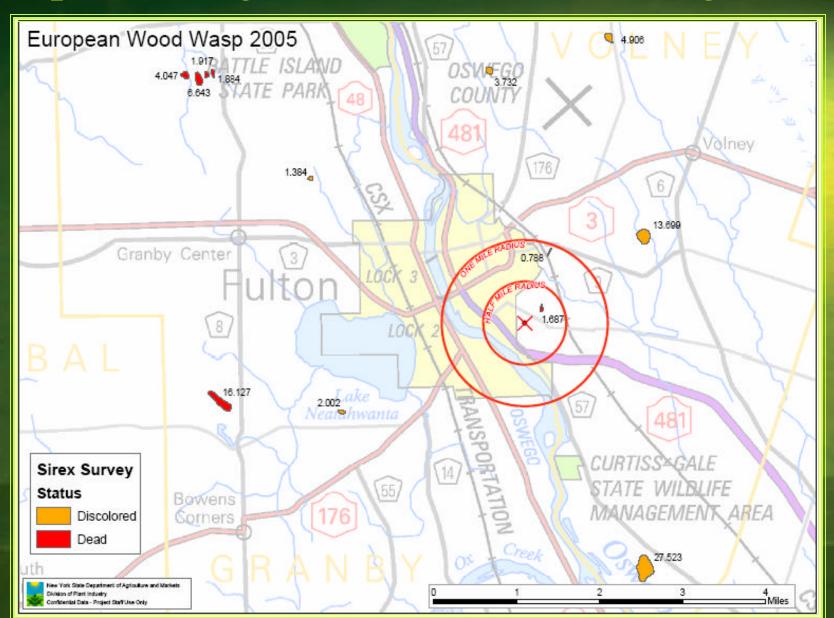
Division of Survey Area per Team



Aerial Survey by U.S. Forest Service



Map Indicting Stressed or Dead Evergreens



Results of Fly Over

- 32 square miles centered on Fulton, NY.
- 53 acres of evergreens identified as discolored.
- 33 acres of evergreens identified as dead.
- 13 sites identified for ground survey.

Phase 2 Forest Survey

May 9 - 13, 2005

Ground Survey



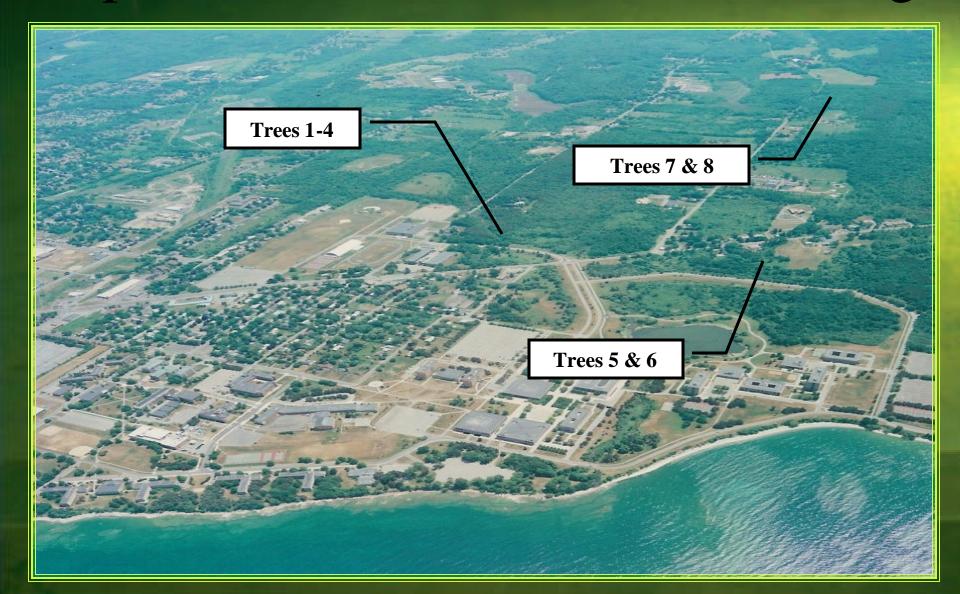
- Locations divided amongst two teams
- Teams were comprised of NYSDAM, USDA-APHIS-PPQ, US Forest Service, & Cornell University

Ground Survey

- Over 80 acres of evergreens were surveyed in Fulton, NY based on US Forest Service Aerial Survey
- 3 locations were surveyed at the State University of New York at Oswego
- 8 trees were tagged that displayed possible signs of Sirex damage.



Suspect Trees Found at SUNY Oswego



Tree Removal

May 20, 2005

Tree removal



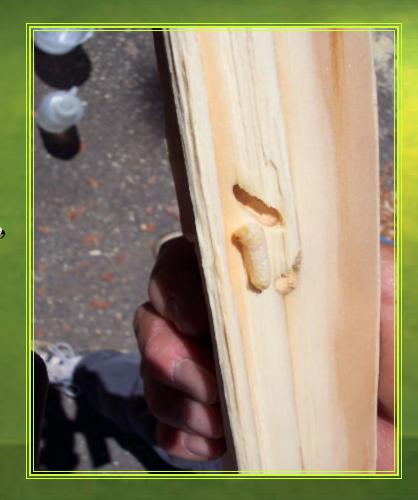






Tree Removal

- Trees 1-4, 7 & 8 were removed
- Trees 5 & 6 were left for monitoring.
- Trees were cut into 12"-18" sections
- Sections were labeled
- Sections were chosen at random for larvae extraction



Dissection of Trees









Trees prepared for transport to quarantine facility at USDA Otis Lab (V. Mastro) & U.S. Forest Lab in Mississippi (N. Schift)



Phase 3 Trapping Survey

July – September, 2005

205 Traps

- 125 Lindgren Funnel Trap baited with:
 - alpha-pinene
 - cis-verbenol
 - ipsidienol
 - methyl butenol
- 50 Cross Vane Stick Trap and 10 Intercept Traps baited with:
 - alpha-pinene
 - beta-pinene
- 20 Trap Logs (no bait)

All traps are suspended 7ft off the ground to the bottom of the trap

Traps Used

